

BOUND BY SOUND

USB 9640
LED
PAR LAMP



Introduction

Thank you very much for purchasing the **USB 9640**, our 5-channel LED Par that can work in AUTO, AUDIO and DMX mode. To assure the reliable performance it is designed for, please read the instructions in this manual thoroughly and carefully before application.

Safety Information

The following definitions of identifying the severity of the hazards associated with the products are used:

“DANGER” Imminently hazardous situation, which if not avoided, will cause death or serious injury.

“WARNING” Potentially hazardous situation, which if not avoided, could cause death or serious injury.

“CAUTION” Potentially hazardous situation, which if not avoided, may cause minor or moderate injury or property damage. In addition, it uses to alert against unsafe practice.

IGNORING A HAZARD WILL VOID ANY WARRANTY.

DANGER: Ensure that the fixture is disconnected from the main power before performing any type of service or any cleaning procedure.

WARNING: No serviceable parts inside the fixture, do not attempt to open it.

WARNING: Qualified professional in accordance with related local codes must perform the Installation.

WARNING: Do not attempt to operate the fixture before read and understand the installation instructions and safety labels.

CAUTION: Do not modify, alter, or attempt to service the USB 9640.

CAUTION: Always ground (earth) the fixture electrically.

CAUTION: Refer all service to a qualified technician.

CAUTION: When suspending the fixture above ground level or place it on the ground, verify that the structure or surface can hold at least 10 times the weight of all installed devices.

Unpacking

The **USB 9640** has been thoroughly tested and shipped in perfect operating condition. Check the shipping carton carefully for damage that may have occurred during shipping. If the carton appears to be damaged, carefully inspect your fixture for damage and be sure all accessories necessary to operate the fixture have arrived intact. In case damage has been found or parts are missing, please contact the sales person for further instructions.

You will find the following components inside the box:

- 1 **USB 9640**
- 3-pin DMX XLR cable
- This User Manual
- 3-wire IEC power cable

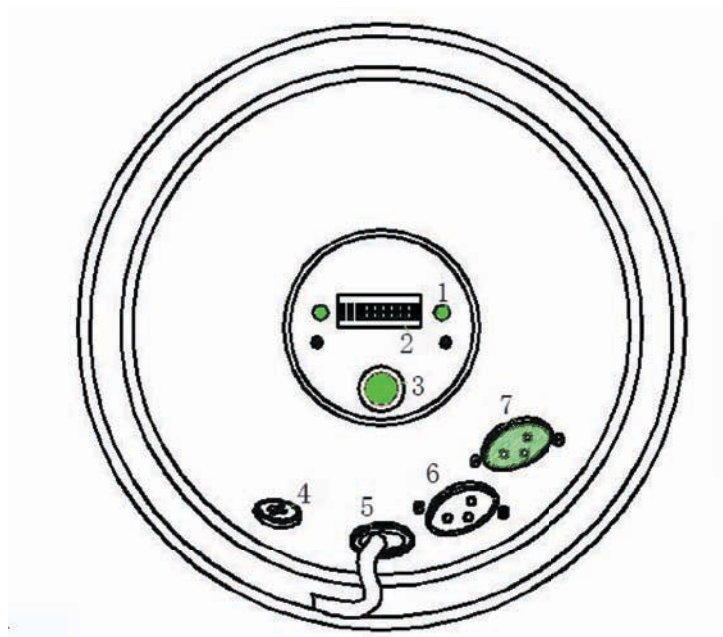
Specifications

- Power Supply: AC 240V/50 Hz
- LED Configuration: 174 Pcs. (R=80PCS 0.044w, G=66PCS 0.064w, B=54PCS 0.064w)
- Power Consumption: 19 Watt
- Dimension: 255 x 200 x 200 mm
- Weight: 2.3 Kg

Features

- Low power consumption
- Maintenance free operation
- 100.000 hours rated LED lifespan
- 174 Pcs. of LED generates 16.7 million additive RGB colors
- DMX or stand-alone mode with Master/Slave function
- 18 built-in programs accessed via DMX-controller or manually
- Sound-activated via built-in microphone of adjustable sensitivity
- Brilliant light output

Panel review



1. LED indicator

2. Dipswitches

3. Microphone

4. Fuse

5. Power input

6. DMX in

7. DMX out

Installation and operation

Mounting

The fixture can be mounted overhead by a clamp or against a flat surface by the bracket it has. When you mount overhead, you can connect its bracket with the clamp through the center hole. Verify the structure can hold 10 times the weight of all installed fixtures.

Always use a safety cable or chain as a assistant attachment. The safety cable or chain must hold 10 times the weight of all installed fixtures.



AC power

The fixture's mains lead may require a grounding-type cord cap that fits your power distribution cable or outlet. Consult a qualified electrician if you have any doubts about proper installation.

WARNING: *For protection from dangerous electric shock, the fixture must be grounded (earthed). The AC mains power supply shall have overload and ground-fault protection.*

CAUTION: *Verify that the feed cables are undamaged and rated for the current requirements of all connected devices before use.*

Following the cord cap manufacturer's instructions, connect the yellow and green wire to ground (earth), the brown wire to live, and the blue wire to neutral. The table below details some pin identification schemes.

Wire	Pin	Marking	Screw color
Brown	Live	"L"	Yellow or brass
Blue	Neutral	"N"	Silver
Yellow or green	Ground	≡	Green

Understanding DMX

About DMX

DMX is the abbreviation of Digital Multiplex. It's a universal protocol used by most audio, lighting and controller manufactures as a form of communication between fixtures and controllers. A DMX controller sends out DMX data instructions to the fixtures via 5-pin XLR cables. The data travels through the DMX chain as a serial data.

DMX is a kind of "common language" allowing all products of different manufactures to be linked together and operate from a single controller, as long as all fixtures and the controller are DMX compatible. To ensure proper DMX data transmission, when using several DMX fixtures try to use the shortest cable path possible.

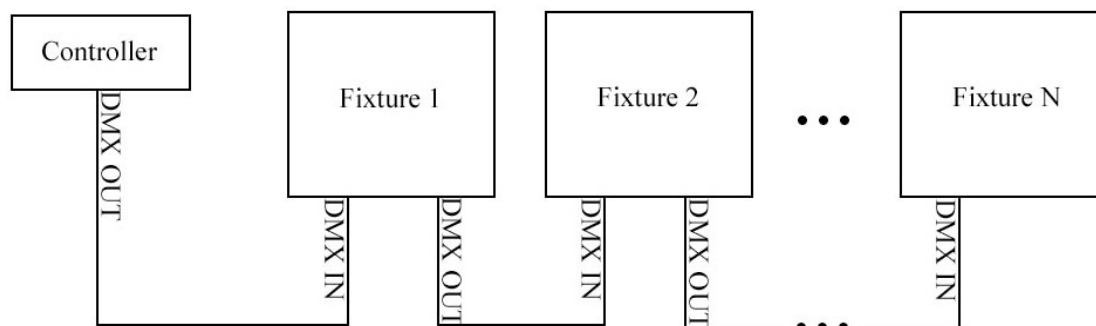
DMX Cable Requirements:

Your fixture, **USB 9640** uses 3-pin XLR cable as connection media. We provide each fixture with a 3-pin XLR cable for you to chain the fixtures.

Connection of DMX

Connect the provided DMX XLR cable to the female 3-pin XLR output of your controller and the other side to the male 3-pin XLR input of the fixture (please refer to the figure “**Installation and Operation**” below).

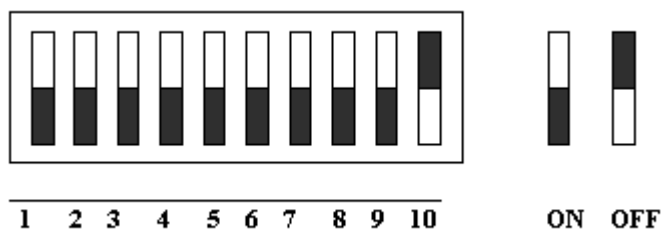
You must chain multiple fixtures together through serial linking, never split your DMX connections unless you are using a splitter/signal amplifier.



DMX addressing

All fixtures should be given a DMX starting address when using a DMX controller, so the correct fixture responds to the correct control signal. This digital starting address is the channel number from which the fixture starts to "listen" to the digital control information sent out from the DMX controller. The allocation of this starting DMX address is achieved by various combining the dipswitches.

This fixture employs 10 dipswitches to access its functions. Normally the dipswitches from #1 to #9 are used for encoding DMX address, the dipswitch #10 for enabling DMX mode.



Dipswitch 1 address equals to 1

Dipswitch 2 address equals to 2

Dipswitch 3 address equals to 4

Dipswitch 4 address equals to 8

Dipswitch 5 address equals to 16

Dipswitch 6 address equals to 32

Dipswitch 7 address equals to 64

Dipswitch 8 address equals to 128

Dipswitch 9 address equals to 256

DMX address=Dipswitch 1+Dipswitch 2+...+Dipswitch 9.

Operation Instructions

Brief function chart

Switch Function		#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
DXM		Set DMX address (see DMX address chart for details)									1
Slave		X	X	X	X	X	X	X	X	X	1
Master	Fade and Auto	Choose program via switch 1~3 (See program choose chart for details)			Choose speed via switch 4~6 (See speed choose chart for details)			1	X	0	0
	Auto							0	X	0	0
	Sound				X	X	X	X	X	1	0

Notes:

In sound active mode: No fade; Run to sound; Choose different programs via switch 1~3

Connect DMX controller with the fixture through 3-pin XLR signal cord.

In master/slave mode, fixtures can run at the same time by setting one of fixtures as auto mode, the left DMX mode.

In DMX mode, please pay attention to such points: set DMX channel address via switch 1~9 ranging from 1~512.

Modes

Auto mode

When dipswitches #9 & #10 are both set at OFF, the fixture works in Auto mode. The detailed setting you can check in following table:

Combination of Dipswitch #1, #2 and #3 to select different PROGRAM:

Dip #1	Dip #2	Dip #3	PROGRAM selected
OFF	OFF	OFF	PROGRAM 1 (red twinkle)
ON	OFF	OFF	PROGRAM 2 (Green twinkle)
OFF	ON	OFF	PROGRAM 3 (Blue twinkle)
ON	ON	OFF	PROGRAM 4 (Red and Green twinkle)
OFF	OFF	ON	PROGRAM 5 (Red &Blue twinkle)
ON	OFF	ON	PROGRAM 6 (Green &Blue twinkle)
OFF	ON	ON	PROGRAM 7 (Red, Green &Blue twinkle)
ON	ON	ON	PROGRAM 8 (7-color twinkle)

Note:

Dipswitch #4, #5 and #6 specify the speed of the running PROGRAM with 8 levels of different speed adjustable. Dipswitch #7 is for FADE selection. OFF turns FADE off while ON turns FADE on.

Sound Active mode

When dipswitch #9 is ON and dipswitch #10 is OFF the fixture works in Sound active mode. Various combining of dipswitch #1, #2 and #3 forms different PROGRAM

DIP #1	DIP #2	DIP #3	PROGRAM selected
OFF	OFF	OFF	PROGRAM 1 (red twinkling)
ON	OFF	OFF	PROGRAM 2 (Green twinkling)
OFF	ON	OFF	PROGRAM 3 (Blue twinkling)
ON	ON	OFF	PROGRAM 4 (Red and Green twinkling)
OFF	OFF	ON	PROGRAM 5 (Red &Blue twinkling)
ON	OFF	ON	PROGRAM 6 (Green &Blue twinkling)
OFF	ON	ON	PROGRAM 7 (Red, Green &Blue twinkling)
ON	ON	ON	PROGRAM 8 (7-color twinkling)

Note:

In this mode step is triggered by the rhythm of sound.

DMX mode

When dipswitch #10 is set at ON, the fixture works in DMX mode. By various combining the Dipswitches #1 to #9 you can set the address ranging from 1 to 512.

At this moment, the fixtures can be controlled by DMX controller or another fixture that has been designated as Auto or Sound Active mode with 5 channels receiving the data controlling the Red, Green, Blue, brightness and strobe rate output of the fixture respectively.

Note:

The address encoded by combining dipswitches #1 to #9 function as initial channel address.

DMX channel and function chart

Channel	Value	Function
CH1	0~255	Adjust CH1 value 0~255 and brightness of red LED is 0~100%
CH2	0~255	Adjust CH2 value 0~255 and brightness of green LED is 0~100%
CH3	0~255	Adjust CH3 value 0~255 and brightness of blue LED is 0~100%
CH4	0~255	Adjust CH4 value 0~255 and brightness of all LEDS is 0~100%
CH5	0~10	No strobe
	11~255	Adjust CH5 value 11~255 and all LEDS strobe. Strobe speed is from slowest to fastest.

Master/slave mode

Set switch 10 of slaves ON and switch 10 of master OFF, it is in MASTER/SLAVE mode and they can run at the same time. Master mode has three working ways: auto with fade, auto without fade and sound. You can choose program via switch 1~3 and choose auto speed via switch 4~6 in auto mode.

Maintenance and cleaning

Please refer to the following points during the normal inspection:

- A. Be sure all screws and fasteners are securely tightened at all times. Loose screws may cause unexpected damage or injury.
- B. Electric power supply cables must not show any damage or frayed spots.



CAUTION:

Make sure that the power cord of the unit is disconnected from the mains before performing the following operation to avoid shock hazard!

We recommend, if possible, frequent cleaning of the device, which will ensure its long lifespan and bright light output. While performing the cleaning, **please always make sure that the power cord is disconnected from the mains** and use a moist, lint-free cloth. Avoid using any alcohol or solvents, as they are harmful to the fixture.

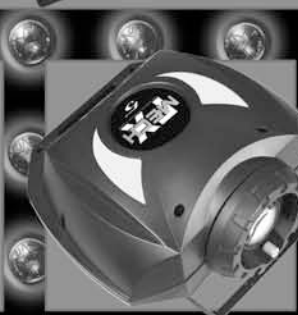
Appendix

DMX address chart

SWITCH SET 0 = OFF 1 = ON					#9	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	
					#8	0	0	0	0	1	1	1	1	0	0	0	0	1	1	1	1
					#7	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1
					#6	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1
#1	#2	#3	#4	#5																	
0	0	0	0	0			32	64	96	128	160	192	224	256	288	320	352	384	416	448	480
1	0	0	0	0		1	33	65	97	129	161	193	225	257	289	321	353	385	417	449	481
0	1	0	0	0		2	34	66	98	130	162	194	226	258	290	322	354	386	418	450	482
1	1	0	0	0		3	35	67	99	131	163	195	227	259	291	323	355	387	419	451	483
0	0	1	0	0		4	36	68	100	132	164	196	228	260	292	324	356	388	420	452	484
1	0	1	0	0		5	37	69	101	133	165	197	229	261	293	325	357	389	421	453	485
0	1	1	0	0		6	38	70	102	134	166	198	230	262	294	326	358	390	422	454	486
1	1	1	0	0		7	39	71	103	135	167	199	231	263	295	327	359	391	423	455	487
0	0	0	1	0		8	40	72	104	136	168	200	232	264	296	328	360	392	424	456	488
1	0	0	1	0		9	41	73	105	137	169	201	233	265	297	329	361	393	425	457	489
0	1	0	1	0		10	42	74	106	138	170	202	234	266	298	330	362	394	426	458	490
1	1	0	1	0		11	43	75	107	139	171	203	235	267	299	331	363	395	427	459	491
0	0	1	1	0		12	44	76	108	140	172	204	236	268	300	332	364	396	428	460	492
1	0	1	1	0		13	45	77	109	141	173	205	237	269	301	333	365	397	429	461	493
0	1	1	1	0		14	46	78	110	142	174	206	238	270	302	334	366	398	430	462	494
1	1	1	1	0		15	47	79	111	143	175	207	239	271	303	335	367	399	431	463	495
0	0	0	0	1		16	48	80	112	144	176	208	240	272	304	336	368	400	432	464	496
1	0	0	0	1		17	49	81	113	145	177	209	241	273	305	337	369	401	433	465	497
0	1	0	0	1		18	50	82	114	146	178	210	242	274	306	338	370	402	434	466	498
1	1	0	0	1		19	51	83	115	147	179	211	243	275	307	339	371	403	435	467	499
0	0	1	0	1		20	52	84	116	148	180	212	244	276	308	340	372	404	436	468	500
1	0	1	0	1		21	53	85	117	149	181	213	245	277	309	341	373	405	437	469	501
0	1	1	0	1		22	54	86	118	150	182	214	246	278	310	342	374	406	438	470	502
1	1	1	0	1		23	55	87	119	151	183	215	247	279	311	343	375	407	439	471	503
0	0	0	1	1		24	56	88	120	152	184	216	248	280	312	344	376	408	440	472	504
1	0	0	1	1		25	57	89	121	153	185	217	249	281	313	345	377	409	441	473	505
0	1	0	1	1		26	58	90	122	154	186	218	250	282	314	346	378	410	442	474	506
1	1	0	1	1		27	59	91	123	155	187	219	251	283	315	347	379	411	443	475	507
0	0	1	1	1		28	60	92	124	156	188	220	252	284	316	348	380	412	444	476	508
1	0	1	1	1		29	61	93	125	157	189	221	253	285	317	349	381	413	445	477	509
0	1	1	1	1		30	62	94	126	158	190	222	254	286	318	350	382	414	446	478	510
1	1	1	1	1	31	63	95	127	159	191	223	255	287	319	351	383	415	447	479	511	

BOUND BY SOUND

ALSO AVAILABLE FROM USB LASTER



THESE PRODUCTS ARE NOT INCLUDED

U.S. Blaster Europe b.v. assumes no responsibility for any damage that could occur due to improper connection of this product